

REMARKS

The undersigned attorney thanks Examiner Monique R. Jackson and Supervisory Primary Examiner Paul J. Thibodeau for the courtesy of the interview on November 19, 2002. The undersigned attorney's presentation focused on showing that the disclosure in column 4 of U.S. Patent No. 5,589,275, (Breitler et al.), when taken in context with the entire disclosure of such patent, referred to a sealable layer on one or both sides of the composite material and not to a sealable layer on one or both sides of a polyamide layer of said composite material. Examiner Jackson disagreed. The undersigned attorney presented an analysis of column 4 and its meaning in the context of the entire patent and the wording in such column. The details are presented in the discussion below of the prior art rejections. The undersigned attorney presented court cases on it being in error to take portions of a prior art reference out of context. The undersigned attorney also presented quotations from documents from the prosecution/examination of Breitler et al. to support applicants' position.

Claim 54 has been cancelled.

The disclosure has been objected to because of the following informalities:

Page 1, line 21 — "it necessary" should be "it is necessary" or similar phrase including a similar verb.

Page 3, line 5 — "poly-1.4" should be "poly-1,4".

Page 3, line 6 — "polyethylene-2.6" should be "polyethylene-2,6".

Page 4, line 21 — "Coextrud-ed" should be "Coextruded" or "Co-extruded".

Page 5, line 27 — “steril-isable” should be “sterilisable” or more preferably “sterilizable”.

Page 7, line 16 — “in particular the of the” should be “in particular, of the”.

Page 7, line 35 — “modifiedpolypropylene” should be “modified polypropylene”.

The Office Action stated that appropriate correction is required. Corrections have been made in the specification.

This objection should be withdrawn.

Claim 54 has been rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claim 54 has been cancelled.

This rejection should be withdrawn.

Claim 54 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claim 54 has been cancelled.

This rejection should be withdrawn.

Claims 38 to 53 have been rejected under 35 U.S.C. 102(b) as being anticipated by Breitler et al., (U.S. Patent No. 5,589,275) for the reasons recited previously in paragraph 3 of Paper No. 11, given that new Claims 38 to 53 are the same as prior Claims 15 to 19, 21 to 22, 27 to 29 and 32 to 37 (38~15,

39~16, 40~17, 41~18, 42~19, 43~21, 44~32, 45~33, 46~34, 47~35, 48~27, 49~28, 50~29, 51~22, 52~36 and 53~37). Applicants traverse this rejection.

The main issue is whether Breitler et al., in column 4, lines 9 to 44, particularly lines 36 to 44, discloses:

- (1) an outerlying sealable (polypropylene) layer on either or both sides of the composite material; or
- (2) a sealable (polypropylene) layer on either or both sides of each polyamide layer (of the composite).

Analysis of the disclosure of Breitler et al. clearly shows that column 4 thereof deals with an outerlying sealable layer on either or both sides of the composite material.

The Patent Office's position that column 4 of Breitler et al. deals with the polyamide layers (instead of the composite material) is in error.

The Patent Office has incorrectly taken portions of column 4 of Breitler et al. out of context and has misanalyzed such disclosure. The context of Breitler et al. is that Breitler et al. is dealing with the composite material.

Throughout all of Breitler et al., the context is the composite material of their invention. When Breitler et al. speaks of "on one or both sides", Breitler et al. is only speaking of the composite material.

The C.A.F.C. in Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc. 230 U.S.P.Q. 416, 419-420, (1986), stated:

"The court also engaged in improper hindsight analysis to conclude the '814 patent would have been obvious. ***."

"Barnes-Hind selected a single line out of the Caddell specification to support the above assertion: ***. This statement, however, was improperly taken out of context. As the former Court of Customs and Patent Appeals held:

It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art.

In re Wesslau, 353 F.2d 238, 241, 147 USPQ 391,393 (CCPA 1965); see also *In re Mercer*, 515 F.2d 1161, 1165-66, 185 USPQ 774,778 (CCPA 1975)."

"A full appreciation of Caddell's statement requires consideration of the immediately following sentences in the same paragraph and the paragraph after that. Viewed in that context, it is apparent that ***. *** A complete reading demonstrates quite clearly that ***. The district court improperly viewed an isolated line in Caddell in light of the teaching of the '814 patent to hold for obviousness. This is improper hindsight analysis."

"The district court also failed to consider the Caddell reference in its entirety ***. ***." [Emphasis supplied]

The C.A.F.C. in *In re Evanega et al.*, 4 USPQ 2d 1249, 1251, (1987), stated:

"When read together and in context, ***. *** Instead, the entirety of Schuurs suggests that ***. See *Panduit Corp. v. Dennison Mfg. Co.*, 810

F.2d 1561, 1568, 1 USPQ 2d 1593, 1597, *cert. denied*, 107 S.Ct. 2187 (1987) (in determining obviousness, a prior patent must be considered in its entirety). Thus, we conclude that the board erred in determining that Schuurs established a prima facie case.”

The context of all the disclosure of Breitler et al. is the composite material of their invention. Breitler et al., for example states:

“The invention relates to a metal-plastic composite material ***.” [Emphasis supplied] [Col. 1, lines 6 and 7]

“The object of the present invention is to provide a metal-plastic composite material ***.” [Emphasis supplied] [Col. 2, lines 25 and 26]

“The objective is achieved by way of the invention in the form of a *** composite material ***.” [Emphasis supplied] [Col. 2, lines 29 to 31]

“The composite material ***.” [Abstract, first line]

The portion of column 4 of Breitler et al. relied upon by the Patent Office clearly deals with sealable layers located on the outer sides of the composite material. The context is entirely in terms of the composite material. There is no teaching of a sealing layer between a polyamide layer and the metal layer in the text in lines 3 to 45 of column 4 of Breitler et al., which reads as follows:

“The plastic layers on both sides of the metal layer of the composite according to the invention ***.”

"The plastic layers on both sides of the metal layer, in particular the polyamide-based thermoplastics may additionally, and independent of each other, be provided with an outer lying sealable layer and/or a barrier layer of thermoplastics."

"The composite according to the invention may also feature a sealing layer or sealable layer on one or both sides."

"The composite material according to the present invention forms a composite containing plastic film that, in order to extend the range of properties, may be coated with one or more layers of material such as e.g. plastic films."

"Sealable layers are e.g. sealable films deposited e.g. via adhesives that contain or are free of solvents, or water-based adhesive systems, applied by extrusion lamination or lamination coating. Sealable films may contain or consist of e.g. LLDPE, LDPE, MDPE, HDPE, polypropylene, polyethylene-terephthalate or polyolefin-based isomers. Ionomers or ionomer-containing polymers with typical properties of ionomers may be thermoplastic copolymers of olefin with carboxyl-containing monomers, a part of which are present as free carboxyl groups and the remainder bonded to metal cations so that some transverse cross-linking is achieved. Polyethylene-based ionomers are known under the trade name Surlyn. Sealable films may be 6 to 100 µm. Furthermore, one or more layers e.g. 1 to 10 µm thick, of a sealing coating or hot-sealing coating, for example, may be deposited on the plastic film composite."

"A single or double-sided sealable composite is obtained by single or double-sided coextrusion of the plastic layers with e.g. a polypropylene/polyethylene copolymer."

"In that connection it is useful for the plastic layers to contain or comprise of a polyamide-based thermoplastic and at least one a polyamide-based thermoplastic to feature a sealing layer on at least one side i.e. each layer of polyamide-based thermoplastic may be covered with a sealable layer on one or both sides, independent of the other layers." [Emphasis supplied]

All references to sealing layers in such text are exclusively to sealing layers, located on the outer surfaces of the composite material, i.e., on the outer surface of the plastic layers of the composite material.

Lines 36 to 45 of column 4 of Breitler et al. recites "*** with a sealable layer on one or both sides, ***" This statement refers to the sides of the composite material (and not to the polyamide layers) as shown by the language of lines 36 and 39 and the overall context of usage in Breitler et al. This is further confirmed by usage of such language elsewhere in Breitler et al.

Breitler et al., in column 5, line 49, to column 6, line 14, states:

"Typical arrangements of the layers in composites according to the invention include for example:

- a) a middle layer of aluminium of thickness e.g. 8 to 80 µm, preferably 40 to 70 µm and in particular 45 to 60 µm, and on each side of the aluminum layer

b) and b') a layer of adhesive coating and/or bonding agent having
a thickness of 1.5 to 9 μm , or 1 to 10 g/m^2

c) and c') a layer of a biaxially stretched polyamide of thickness
e.g. 20 to 50 μm , preferably 20 to 40 μm and in particular
20 to 30 μm

and if desired

d) and d') a barrier layer on one or both sides

and if desired

e) and/or e') a layer of a sealing coating or sealing layer on one
or both sides in a quantity of 2 to 6 g/m^2 , or of thickness up
to 10 μm ."

* * *

"Useful composite materials contain ***. *** Analogously,
layers b), c), d) and e) are provided on one side of layer a) and
layers b'), c'), d') and e') on the other side of layer a)." [Emphasis
supplied]

Page 2100-120 of the M.P.E.P. states that a "prior art reference must be
considered in its entirety, i.e., as a whole, ***." It is error for the Patent Office to
take a sentence(s) out of context, particularly where such sentence(s), as here,
refer to other sentences/paragraphs that clearly establish the context.

Lines 9 to 13 of column 4 of Breitler et al. states:

"The plastic layers on both sides of the metal layer, in particular the
polyamide-based thermoplastics may additionally, and independent of

each other, be provided with an outer lying sealable layer and/or a barrier layer of thermoplastics." [Emphasis supplied]

Such text is not discussing the plastic layers by themselves but instead only as components in the structure of the basic composite material. The use of the phrase "outer lying sealable layer" refers only to the outside surfaces of the basic composite material (i.e., the outside surface of each of the plastic layers). The words "outer lying" refer only to the side of each of the plastic layers away from the metal foil. Furthermore, the above quotation also shows that the sealable layers were only located on the outside of the composite material on the outer side of the polyamide layers.

The phrase "on outer lying sealable layer and/or a barrier layer" restricts the sealable layer to the outside surface of the plastic layers in the composite material. The term "outer lying" does not modify the barrier layer.

When Breitler et al. meant that a substance or layer could be located between a plastic layer and the metal layer, the text clearly says or indicates so. Column 4, lines 46 to 61, of Breitler et al. states:

"Beside the metal foil, at least one additional layer may be provided as a barrier layer ***. *** Barrier layers are situated for example between the metal layer and the polyamide layer or layers; the barrier layers are preferably situated on the polyamide layer on the opposite side facing the metal layer. Foreseen in particular is a barrier layer on one side of the metal layer only, lying on the polyamide layer."

The above quotation recites that the barrier layer can be between one of the plastic layers and the metal foil. The term "outer lying" does not modify "a barrier layer", but instead restricts the location of the "sealable layer" to the outside surface of the plastic layer away from the metal foil.

During the examination of Breitler et al., the Patent Office cited U.S. Patent No. 5,100,708 (Heyes et al.) against their underlying application. Heyes et al. disclosed a laminated metal sheet where the metal sheet had on one of its (major) surfaces a composite of an inner layer (A¹) of thermoplastic polymer and an outer layer (B¹) of thermoplastic polymer. Page 3 of the Office Action of March 5, 1996 therein stated: "The thickness of the inner and outer layer of the thermoplastic polymer ***." The Patent Office clearly was aware of that which was meant by "outer" or "outer laying" in the Breitler et al. application. Page 3 of the Amendment of October 13, 1995 stated: "In Heyes et al., the wording 'inner' means between the metal layer and the outer layer. Both the inner and outer layers are arranged on the same side of the metal sheet." The prosecution/examination history of Breitler clearly shows that the terms "outer" and "outer lying" do not mean between the metal foil and a polyamide layer.

There is no reason in the composite material of Breitler et al. to have an inner sealable layer (it already typically has an adhesive coating and/or bonding agent between the metal foil and the polyamide layer). The sealing layer of Breitler et al. is used only as the outermost layer for the purpose of safely fixing

or sealing the lid to the base part of a packaging. The Patent Office did not correctly analyze column 4 of Breitler et al. in view of such reference as a whole.

This rejection should be withdrawn.

Claims 38 to 53 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Breitler et al. in view of *Ullmann's Encyclopedia of Industrial Chemistry*, (Ullmann), for the reasons recited previously in paragraph 4 of Paper No. 11, given that new Claims 38 to 53 are the same as prior Claims 15 to 19, 21, 22, 27 to 29 and 32 to 37. Applicants traverse this rejection.

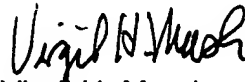
As shown above, Breitler et al. does not disclose any sealing layer (polypropylene) between the metal foil and a polyamide layer. Ullmann also does not disclose such information. Therefore, the combination of Breitler et al. and Ullman does not result in applicants' claimed invention and, hence, applicants' claimed invention is not obvious over such combination.

This rejection should be withdrawn.

The Examiner said that the issue of obviousness-type double patenting as regards commonly-assigned U.S. Serial No. 10/083,110 should be addressed. The matter appears to involve a one-way determination of obviousness. Applicants have enclosed an executed terminal disclaimer and a check for the terminal disclaimer fee.

Reconsideration, reexamination and allowance of the claims are
requested.

Respectfully submitted,



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DATE: Dec. 4, 2002

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claim 54 has been cancelled.

In the Specification:

The original paragraph on page 1, lines 20 to 24, has been replaced with the following rewritten version of the paragraph on page 1, lines 20 to 24, as amended:

Manufacturing such a composite is complicated as the various process steps may have to be carried out in different facilities. Depending on the number and type of layers it is necessary to employ a corresponding number of passes through the machine. As a result of the many layers of adhesive, delamination may readily occur under the conditions required for [sterilis-ation] sterilization.

The original paragraph on page 3, lines 1 to 10, was replaced with the following rewritten version of the paragraph on page 3, lines 1 to 10, as amended:

Examples of polyester type films are polyalkylene-terephthalates or polyalkylene-isophthalates with alkylene groups or radicals with 2 to 10 carbon atoms or alkylene groups with 2 to 10 C atoms that are interrupted, e.g., by one or two -O-, [.] such as, [e.g.] polyethylene-terephthalate (PET films), polypropylene-terephthalate, polybutylene-terephthalate [(poly-tetramethylene-terephthalate)] polytetramethylene-terephthalate, polydecamethylene-terephthalate, poly-1,4-cyclohexyl-dimethylol-terephthalate or polyethylene-2,6-naphthalene-dicarboxylate [poly-1.4-cyclohexyl-dimethylol-terephthalate or

polyethylene-2,6-naphthalene-dicarboxylate] or mixed polymers of polyalkylene-terephthalate and polyalkylene-isophthalate, where the fraction of isophthalate amounts, e.g., to 1 to 10 mol %, mixed polymers and terpolymers, also block polymers and grafted modifications of the above mentioned substances. Other useful polymers are known in the field under the abbreviation PEN.

Please substitute for the original paragraph on page 4, lines 12 to 24, the following rewritten version of the paragraph on page 4, lines 12 to 24, as amended:

The plastic films of the polyamide type contain e.g. polyamide 6, a homopolymeride of ϵ -caprolactam (polycaprolactam); polyamide 11, polyamide 12, a homopolymeride of ω -laurin-lactam (polylaurinlactam); polyamide 6.6, a homopolymer condensate of [hexa-methylene-diamine] hexamethylene-diamine and adipinic acid [(poly-hexa-methylene-adipamide)] polyhexamethylene-adipamide; polyamide 6.10, a homopolymer condensate of hexamethylene-diamine [hexa-methylene-diamine] and sebacinic acid [(poly-hexa-methylene-seba-camide)] polyhexamethylene-sebacinic-diamide; polyamide 6.12, a homopolymer condensate of [hexa-methylene-diamine] hexamethylene-diamine and dodecandic acid [(poly-hexa methylene-dodecanamide)] polyhexamethylene-dodecanamide or polyamide 6-3-T, a homopolymer condensate of trimethylhexamethylene-diamine [trimethyl-hexamethylene-diamine] and terephthalic acid [(poly-trimethyl-hexa-methylene-terephthalamide)] polytrimethylhexamethylene-terephthalamide, and mixtures thereof. Preferred are polycaprolactams. [Coextrud-ed] Coextruded layers of

polyamides are [to advantage] advantageously non-stretched. The films of polyamides may be [non-stretched] nonstretched or uniaxially or [biaxially] biaxially oriented. The plastic films of the polyamide type may be, e.g., 8 to 50 μm thick, usefully 10 to 40 μm , preferably 15 to 25 μm thick.

The original paragraph on page 5, lines 24 to 35, has been replaced with the following rewritten version of the paragraph on page 5, lines 24 to 35, as amended:

The series of polyamide-polypropylene films may include other variants which result in sterilizable [steril-isable] composite films according to the present invention, in which the composite film exhibits a layer structure containing one superimposed [one] on top of the other or in sequence:

- a) a first functional layer containing a plastic film of the following type, viz., polyesters, polyamides or polyolefins or an extrusion layer of polyolefins or one or more layers of lacquer or print and lacquer layers or print layers, and
- b) a metal foil, and
- c) a plastic layer having a layer arrangement of coextrusion coated, coextruded and/or extrusion laminated polypropylene/polyamide/polypropylene.

The original paragraph on page 7, lines 16 to 18, has been replaced with the following rewritten version of the paragraph on page 7, lines 16 to 18, as amended:

The free side, in particular, [the] of the polyester film, may be coated with EVA (ethylene/vinyl alcohol copolymer) or with an amorphous polyester sealing layer of the A-PET type. Especially preferred are polypropylenes and polyethylene-terephthalates.

The original paragraph on page 7, lines 35 and 36, has been replaced with the following rewritten version of the paragraph on page 7, lines 35 and 36, as amended:

For example, products based on maleic acid and [modifiedpolypropylene] modified polypropylene or polyethylene may be employed as bonding agents.